



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,974	10/03/2005	Huib Blokland	Vereenigde P62US	7000

7590 02/26/2007
Varnum Riddering Schmidt & Howlett
Bridgewater Place
Post Office Box 352
Grand Rapids, MI 49501-0352

EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
----------	--------------

2859

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,974	BLOKLAND, HUIB	
	Examiner	Art Unit	
	Gail Verbitsky	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,8 and 10 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 6 and 7 are objected to under 37 CFR 1.75(c) as being in improper form because they are dependent on multiple dependent claim 5. See MPEP § 608.01(n). Accordingly, the claims 6 and 7 not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schawe et al (U.S. 6170984) [hereinafter Schawe].

Schawe discloses a device/ method for determining a sample/ substance thermal property (phase transition), the device comprising a heat flow (to/ from the substance) determining (col. 5, line 57) and thus, providing a first measuring signal by measuring/ obtaining the heat flow, generating temperature signal phase shifted relative to the heat flow mad measuring/ obtaining said temperature (phase shifted), determining difference between the first signal and the temperature (phase shifted) signal and determining a phase transition temperature based on said difference/ comparison ((col. 8, lines 41-42), entire cols.11-12) . This would imply that there are means for determining difference (combining means) and means for determining said signals.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schawe et al (U.S. 6170984) [hereinafter Schawe] in view of Hutter et al. (U.S. 6318890) [hereinafter Hutter].

Schawe discloses a device/ method for determining a sample/ substance thermal property (phase transition), the device comprising a heat flow (to/ from the substance) determining (col. 5, line 57) and thus, providing a first measuring signal by measuring/ obtaining the heat flow, generating temperature signal phase shifted relative to the heat flow mad measuring/ obtaining said temperature (phase shifted), determining difference between the first signal and the temperature (phase shifted) signal and determining a phase transition temperature based on said difference/ comparison (col. 8, lines 41-42, entire cols.11-12) . This would imply that there are means for determining said signals.

Schawe does not explicitly teach the limitations of claims 2-4.

Hutter discloses in Fig. 1 a device in the field of applicant's endeavor comprising two opposite surfaces 1 whose temperature varies (heating/ cooling from power source 28) and measuring a heat flow between the first surface and the sample and the second surface and the sample to determine a net flow. Since varying heat can be either

Art Unit: 2859

heating or cooling (col. 2, line 21), the heat, inherently, flows to or from the sample. As shown in Fig. 1, the surfaces are located at a distance from the sample.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method, disclosed by Schawe, so as to vary heating/ cooling as taught by Hutter, in order to obtain the change in the sample thermal behavior, and thus, determine a phase transition temperature, in order to identify the sample.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schawe in view of Sahm et al. (U.S. 6193697) [hereinafter Sahm]

Schawe discloses the device as stated above.

Schawe does not explicitly teach a combining element, as stated in claim 10.

Sahm discloses a device in the field of applicant's endeavor wherein Sahm teaches to determine difference between two output signals by using a differential amplifier (inherently, having negative and positive inputs).

Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the device, disclosed by Schawe, so as to replace the combining element with a differential amplifier, as taught by Sahm, because both of them are alternate types of devices used for obtaining difference between signals and will perform the same function if one is replaced with the other.

Allowable Subject Matter

7. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Reading (U.S. 5346306) discloses a device/ method in the field of applicant's endeavor. Reading states that a kinetic parameter (i.e., phase transition) could derive from heat flow, temperature and phase shift (col. 4, lines 60-68).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gail Verbitsky whose telephone number is 571/ 272-2253. The examiner can normally be reached on 7:30 to 4:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571/ 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/526,974

Page 6

Art Unit: 2859

GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800

A handwritten signature in cursive script, appearing to read 'G. Verbitsky', written in black ink.

February 12, 2007